

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

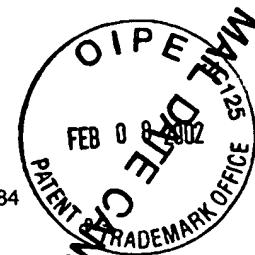
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



U.S. PATENT DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
AS		US-4,622,013	11/11/1986	Cherchio
		US- 4,874,784	10/17/1989	Clancey
		US- 4,981,766	01/02/1990	Derr, et al.
		US- 4,931,950	06/05/1990	Isle, et al.
		US- 4,964,077	10/16/1990	Eisen, et al.
		US- 4,977,529	12/11/1990	Gregg, et al.
		US- 5,002,491	03/26/1991	Abrahamson, et al.
		US- 5,170,464	12/08/1992	Hayes, et al.
		US- 5,189,402	02/23/1993	Naimark, et al.
		US- 5,208,745	05/04/1993	Quentin, et al.
		US- 5,208,898	05/04/1993	Funabashi, et a
		US- 5,239,617	08/24/1993	Gardner, et al.
		US- 5,259,766	11/09/1993	Sack et al.
		US- 5,267,865	12/07/1993	Lee, et al.
		US- 5,310,349	05/10/1994	Daniels, et al.
		US- 5,311,422	05/10/1994	Loftin, et al.
		US- 5,317,688	05/31/1994	Watson, et al.
		US- 5,326,270	07/05/1994	Ostby, et al.
		US- 5,359,701	10/25/1994	Chiang, et al.
AS		US- 5,372,507	12/13/1994	Goleh

RECEIVED

FEB 13 2002

Technology Center 2100

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
AS		EP 0 689 132 A2	12/27/95	Laffra
		EP 0 710 942 A2	05/08/96	Siefert
		EP 0 710 942 A2	05/08/96	Siefert
		EP 0 798 655 A2	10/01/97	Jervis, et al.
		WO 00/04478	01/27/00	Jonsson
		WO 97/44766	11/27/97	Cook
		WO 98/03953	01/29/98	Simmons
		WO 98/25251	06/11/98	Ho
AS		WO 98/32109	07/23/98	De Lange

Examiner Signature		Date Considered	10/31/03
--------------------	--	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449 A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
15		"Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 556-58, Dec. 1997	
		"Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, Feb. 1999	
		"Applications of BrainMaker Neural Network to stocks, business, medical, manufacturing" at <a href="http://www.calsci.com/Applications.html">www.calsci.com/Applications.html</a>	
		"KBLPS Overview" at <a href="http://www.cgi.com/CGIWEB/KBLPS/overindex4.html">www.cgi.com/CGIWEB/KBLPS/overindex4.html</a>	
		"Smartlaw: adapting classic expert system techniques for the legal research domain", ACM pp 133-141	
		"Interactive Multimedia Instructs the Individual," Oct. 1994, Occupational Health & Safety Vol. 63, No. 10, pp. 144-145	
		"Practical methods for automatically generating typed links", ACM Hypertext, pp 31-41	
		"Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," <a href="http://www.centurionsys.com/rcl57.html">http://www.centurionsys.com/rcl57.html</a> , Aug. 1997	
		"Technical Report: Computer Aided Education and Training Initiative" at <a href="http://advlearn.Irdc.pitt.edu/advlearn/papers/FINALREP.html">http://advlearn.Irdc.pitt.edu/advlearn/papers/FINALREP.html</a>	
		"FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, 1995	
17		"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74	

Examiner Signature

Date Considered

10/31/03

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED  
Technology Center 2100  
FEB 13 2003

I Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

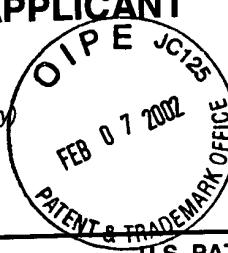
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
A S		US-5,727,950	03/17/1998	Cook, et al.	
		US-5,745,652	04/28/1998	Bigus	
		US-5,772,446	06/30/1998	Rosen	
		US-5,779,468	07/14/1998	Ho, et al.	
		US-5,788,508	08/04/1998	Lee, et al.	
		US-5,791,907	08/11/1998	Ramshaw, et al.	
		US-5,799,151	08/25/1998	Hoffer	
		US-5,799,292	08/25/1998	Hekmatpour	
		US-5,806,056	09/08/1998	Hekmatpour	
		US-5,810,747	09/22/1998	Brudney, et al.	
		US-5,822,745	10/13/1998	Hekmatpour	
		US-5,823,781	10/20/1998	Hitchcock, et al.	
		US-5,823,788	10/20/1998	Lemelson, et al.	
		US-5,835,683	11/10/1998	Corella, et al.	
		US-5,868,575	02/09/1999	Kuczewski	
		US-5,870,768	02/09/1999	Hekmatpour	
		US-5,875,437	02/23/1999	Atkins	
		US-5,889,845	03/30/1999	Staples, et al.	
		US-5,893,123	04/06/1999	Tuinenga	
		US-5,911,581	06/15/1999	Knight Jeremy, et al.	

**RECEIVED**

FEB 13 2002

**Technology Center 2100**

## **FOREIGN PATENT DOCUMENTS**

**Examiner  
Signature**

**Date Considered**

10 / 31 / 03

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance  
Initials \_\_\_\_\_ Date \_\_\_\_\_  
Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov).  
<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any questions concerning the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark

Substitute for form 1449 A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"Artificial Intelligence and Mathematics Education" at <a href="http://www.rand.org/hot/mcarthur/Papers/aied.html">http://www.rand.org/hot/mcarthur/Papers/aied.html</a>	
		"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at <a href="http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html">http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html</a>	
		"WITS: A Reusable Architecture for a VR-Based ITS" at <a href="http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html">http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html</a>	
		"Brainmaker" at <a href="http://www.npiec.on.ca/~echoscan/28-04.htm">www.npiec.on.ca/~echoscan/28-04.htm</a>	
		"News for ESAP" at <a href="http://www.hops.wharton.upenn.edu/~esap/news.html">www.hops.wharton.upenn.edu/~esap/news.html</a>	
		"Learning with Computers," May 1994, Accountancy Vol. 113, No. 1209, pp. 67-68	FEB 13 2002
		"User-Sensitive Multimedia Presentation System," March 1, 1996, Vol. 39, No. 3, pp. 93-94	Technology Center 2100
		"Microworlds and Simuworlods: Practice Fields for the Learning Organization," Spring 1996, Organizational Dynamics Vol. 24, No. 4, pp. 36-49	
		"What are Intelligent Coaching Systems and Why are they (in)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998	
AS		"Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium 1996.	

Examiner Signature

Date Considered

10/31/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**Substitute for form 1449 A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

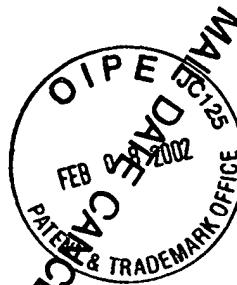
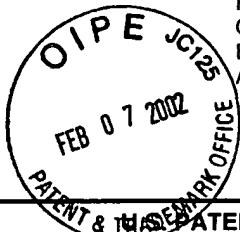
**Filing Date:** 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

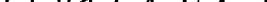
Examiner Name: n/a

Attorney Docket Number: 05222.00184



Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
AS		US-5,974,446	10/26/1999	Sonnenreich, et al.	
		US- 5,987,443	11/16/1999	Nichols, et al.	
		US- 6,003,021	12/14/1999	Zadik, et al.	
		US- 6,015,348	01/8/2000	Lambright, et al.	
		US- 6,016,486	01/18/2000	Nichols	
		US- 6,018,730	01/25/2000	Nichols, et al.	
		US- 6,018,731	01/25/2000	Bertrand, et al.	
		US- 6,018,732	01/25/2000	Bertrand, et al.	
		US- 6,023,691	02/08/2000	Bertrand et al.	
		US- 6,023,692	02/08/2000	Nichols	
		US- 6,026,386	02/15/2000	Lannert, et al.	
		US- 6,029,156	02/22/2000	Lannert, et al.	
		US- 6,029,158	02/22/2000	Bertrand, et al.	
		US- 6,029,159	02/22/2000	Zorba, et al.	
		US- 6,032,141	02/29/2000	O'Connor, et al.	
		US- 6,064,998	05/16/2000	Zabloudil, et al.	
		US- 6,067,537	05/23/2000	O'Connor, et al.	
		US- 6,067,538	05/23/2000	Zorba, et al.	
		US- 6,073,127	06/06/2000	Lannert, et al.	
AS		US- 6,085,184	07/04/2000	Bertrand, et al.	

**RECEIVED**  
FEB 13 2002  
*Technology Center* 2100

Examiner Signature		Date Considered	10/31/03
--------------------	---	-----------------	----------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_



Application Number : 09/934,924

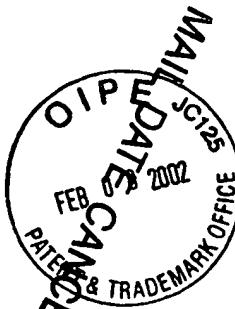
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 307-314, Aug. 1995	
		"Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63	
		"Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
		"Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1376-83, Dec. 1995	
		"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32.	
		"The Lisp Tutor," Byte, pp. 159-75, Apr. 1985	
		"Pedagogical, natural language and knowledge engineering techniques in SOPHIE I, II, and III," in Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982	
		Interactive Multimedia Distance Learning (IMDL): The Prototype of the Virtual Classroom, 1994	
AS		"Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Winter 1997/1998, Journal of Management Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140.	
AS		"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1989, IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57.	

Examiner Signature

Date Considered

10/31/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Substitute for form 1449 A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

Filing Date: 08/22/2001

**First Named Inventor:** Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



**RECEIVED**  
FEB 13 2002  
*anology Center 2100*

Examiner Signature		Date Considered	10/31/03
-----------------------	---	--------------------	----------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

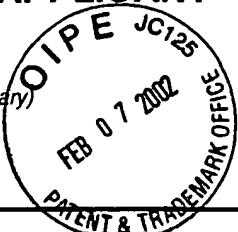
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994	
		"Interface design issue for advising giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31	
		"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997	
		"Architecture of an Intelligent Tutoring System on the WWW," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 39-46 Dec. 1997	
		"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: <a href="http://www.iscs.nus.edu.sg/labs/learning/lets/VRML.html">http://www.iscs.nus.edu.sg/labs/learning/lets/VRML.html</a> ; viewed Feb. 16, 1999	
		Flexible Learning, Feb. 1998, Credit Union Management Vol. 21, No. 2, pp. 32-33+	
		"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-18 Dec. 1997	
		"Train with Less Pain," Oct. 13, 1997, Informationweek No. 652, pp. 150-154	
AS		"Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Autumn 1998, Personnel Psychology Vol. 51, No. 3, pp. 767-71	
AS		"Intelligent Tutoring Systems: An Overview" at <a href="http://www.intellectbooks.com/authors/lawler/its.htm">http://www.intellectbooks.com/authors/lawler/its.htm</a>	

Examiner Signature

Date Considered

10/31/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



RECEIVED  
FEB 13 2002  
Technology Center 2100

Substitute for form 1449 A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



## OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"No More Boring CPE," July 1997, Accounting Technology, pp. 27-35	
		Computer Dictionary, 1997, pp. 264, 276, 383, 446, 462, 507.	
		"Rule-Based Programming with OPS5" at <a href="http://www.mkp.com/books_catalog/O-934613-51-6.asp">www.mkp.com/books_catalog/O-934613-51-6.asp</a>	
		"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, Vol. 2(3), pp. 39-50, Dec. 1997	
		"MUSE U.S. Patents" at <a href="http://www.muser.com/html/patents.html">www.muser.com/html/patents.html</a>	
		"Distributed Intelligent Tutoring on the Web," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 482-89, Dec. 1997	
		"RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997	
		"Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-65, Dec. 1997	
		"Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence," pp. 700-03, Nov. 1994	
AS		"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997.	
AS		"Simulation Technology and Parallelism in Learning Environments" at <a href="http://www.to.utwente.nl/pj/min/Book/chapter1.htm">http://www.to.utwente.nl/pj/min/Book/chapter1.htm</a>	

Examiner Signature		Date Considered	10/31/03
--------------------	--	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

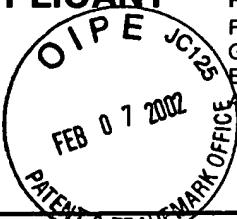
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"Engines for Education" URL: <a href="http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html">http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html</a> ; viewed Feb. 15, 1999.	
		"FinPlan System" at <a href="http://www.mriai.org.ru/FinPlan/">www.mriai.org.ru/FinPlan/</a>	
		"Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996	
		"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14.	
		"Teaching with the internet" 1998, JAI Press Inc., USA. Vol no. 3, pp 217-222	
		"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17.	
V		"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at <a href="http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html">http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html</a>	
AS		Multimedia Training "Get Lemonade, Not a Lemon!" June 1997, Journal for Quality and Participation, Vol. 20, No. 3, pp. 22-26	
AS		"SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-30, Aug. 1995	
AS		"Decision Pro3.0" at <a href="http://www.vanguardsw.com/">www.vanguardsw.com/</a>	

Examiner Signature

Date Considered

10/31/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED  
Technology Center 2100  
FEB 13 2002

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



RECEIVED  
Technology Center 2100  
FEB 13 2003

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"A Fuzzy Logic-Based Intelligent Tutoring System," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992.	
		"The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
		"A Browser-Based System to Support & Deliver DE," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 1, Nov. 4-7, 1998	
		"Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994	
		"Automate Your Business Plan" at <a href="http://www.business-plan.com/screen2.html">www.business-plan.com/screen2.html</a>	
		"Kiplinger TaxCut Press Releases" at <a href="http://www.taxcut.com/taxcut/98press_releases/pr98_nowshipping.html">http://www.taxcut.com/taxcut/98press_releases/pr98_nowshipping.html</a>	
		"TurboTax Deluxe Product Information" at <a href="http://www.intuit.com/turbotax/prodinfo/ttdlx.html">http://www.intuit.com/turbotax/prodinfo/ttdlx.html</a>	
		"Why Should the Teens Have All the Best Games? Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 176, 1996	
		"Template Software Business Simulator, Chapter 8, August 1997	
↓		"Template Software Workflow Simulator, Chapter 8, June 1998	
AS		"Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30	

Examiner Signature

Date Considered

10/31/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**Substitute for form 1449 A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

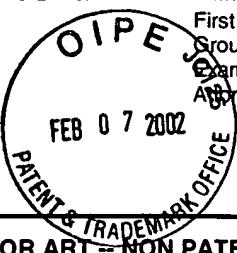
Filing Date: 08/22/2001

**First Named Inventor: Beams**

~~Group Art Unit: 2153~~

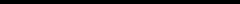
**Examiner Name:** n/a

Attorney Docket Number: 05222.00184



**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AS		"Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, January 1996, pp. 1-37	
AS		"A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, January 1990, pp. 1-24 and 2 pgs. of references	
		"The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, March 1993, pp. 1-58	

Examiner Signature		Date Considered	10/31/03
--------------------	---	-----------------	----------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

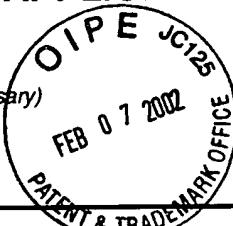
Filing Date: 08/22/2001

First Named Inventor: Beams

Group Art Unit: 2153

Examiner Name: n/a

Attorney Docket Number: 05222.00184



OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
AS		"Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144
		"Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994
		"ACM Transactions on Information Systems," 1988 at <a href="http://www.acm.org/pubs/toc/Abstracts/tois/59298.html">www.acm.org/pubs/toc/Abstracts/tois/59298.html</a>
		The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer: A Success Story 1996.
		"A Special Section -- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, Nov.-Dec. 1994
		"Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, Nov.-Dec. 1994
		"DDD--A Free Graphical Front-End for UNIX Debuggers," Jan. 1996, ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27
		"Automated Training of Legal Reasoning" at <a href="http://www.bileta.ac.uk/94papers/muntjew.html">http://www.bileta.ac.uk/94papers/muntjew.html</a>
		"The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998
AS		"Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Educ., Vol. 13(5), pp-341-46, Dec. 1997
AS		"CAPTOR a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5

Examiner Signature		Date Considered	10/31/03
--------------------	--	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

+ Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED  
Technology Center 2100  
FEB 13 2007

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Substitute for form 1449 A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet \_\_\_\_\_ of \_\_\_\_\_

Application Number : 09/934,924

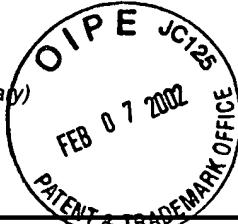
Filing Date: 08/22/2001

First Named Inventor: Beams

First Name/Last Name  
Group Art Unit: 2153

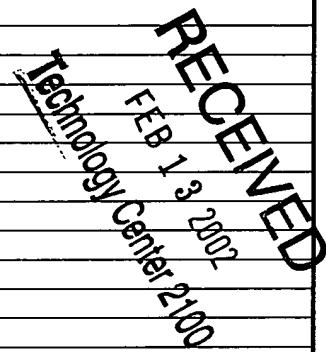
Examiner Name: n/a

Attorney Docket Number: 05222.00184

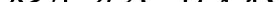


**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
MS		US-5,395,243	03/07/1995	Lutbin, et al.	
		US-5,441,415	08/15/1995	Lee, et al.	
		US-5,491,743	02/13/1996	Shilo, et al.	
		US-5,533,903	07/09/1996	Kennedy	
		US-5,535,422	07/09/1996	Chang, et al.	
		US-5,537,141	07/16/1996	Harper, et al.	
		US-5,539,869	07/23/1996	Spoto, et al.	
		US-5,566,291	10/15/1996	Boulton, et al.	
		US-5,576,844	11/19/1996	Anderson, et al.	
		US-5,577,186	11/19/1996	Mann II, et al.	
		US-5,597,312	01/28/1997	Bloom, et al.	
		US-5,616,033	04/01/1997	Kerwin	
		US-5,644,686	07/01/1997	Hekmatpour	
		US-5,644,727	07/01/1997	Atkins	
		US-5,673,369	09/30/1997	Kim	
		US-5,690,496	11/25/1997	Kennedy	
		US-5,696,885	12/09/1997	Hekmatpour	
		US-5,701,400	12/23/1997	Amado	
		US-5,720,007	02/17/1998	Hekmatpour	
MS		US-5,727,161	03/10/1998	Purcell, Jr.	



## **FOREIGN PATENT DOCUMENTS**

Examiner Signature		Date Considered	10/31/03
-----------------------	---	--------------------	----------

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark